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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/737,211

12/16/2003

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EXAMINER

DESAI, ANISH P

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1771

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/737,211	Applicant(s) JUNGHANS ET AL.	
	Examiner Anish Desai	Art Unit 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant's arguments in response to the Office action dated 12/06/06 have been fully considered.

1. Claims 1-11 are pending. Claims 8-11 are new claims.
2. All of the art rejections are maintained.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Horiki et al. (US 5,897,949) substantially as set forth in the previous Office Action.

In this Office action, the preamble limitation of "for single-sided or double-sided adhesive sheet strips...of the bond" as recited in claim 1, is not given any patentable weight because said preamble limitation is an intended use of the claimed pressure sensitive adhesive. Thus the claim 1 is interpreted as a pressure sensitive adhesive comprising a mixture of at least one block copolymer, at least one tackifier, and at least one water-soluble polymer.

Horiki teaches a masking member comprising a base and an adhesive layer has been provided to protect a surface of an article from a surface treatment (column 1, lines 22-24). Regarding claims 1, 7, and 11 the adhesive of Horiki comprises a water-soluble polymer (column 1, lines 59-61), adhesive such as styrene-butadiene block copolymer latex (column 2, lines 19-20), and stickifier (tackifier) such as rosin derivative (column 2, lines 49-51). Further, regarding claim 7, the adhesive layer of Horiki is

applied onto a base (abstract), which reads on a single-sided adhesive sheet strip. As to claim 11, the adhesive layer of Horiki is interpreted as a double-sided adhesive sheet strip, because a single layer of adhesive having a both sides that are tacky reads on "double-sided" tape.

With respect to claims 2, 3, 8, and 9, Horiki teaches that the amount of water-soluble polymer is from 0.1 to about 20% by weight of the weight of said emulsion-type adhesive (column 1, lines 60-61). Regarding claims 4 and 10, Horiki discloses water-soluble polymers such as polyacrylamide (column 2, line 66). With respect to claim 5, Horiki teaches that plasticizers can be included in the adhesive (column 2, line 42). Regarding claims 6, Horiki teaches calcium carbonate as a filter (filler) (column 2, lines 57-59). Accordingly Horiki strongly anticipates the claimed subject matter.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luhmann et al. (US Patent 5,897,949) in view of Horiki et al. (US 4,868,045) substantially as set forth in the previous Office Action.

Luhmann teaches an adhesive tape which can be redetached by pulling, without residue and without damage, having a foam backing coated on one or the both sides with a self-adhesive composition (see Abstract). The self-adhesive tape of Luhmann can be used in labels, signs, for joining materials which are to be parted at later point in

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time, sealing elements etc. (Column 3, lines 45-58). Moreover, the self-adhesive tape of Luhmann contains block copolymers (Column 3, lines 60-61) and tackifiers (Column 4, line 16). Regarding the claims 5 and 6, the pressure sensitive adhesive of Luhmann contains plasticizers, light stabilizers, antioxidants, and fillers such as silica, glass, alumina, zinc oxides, calcium carbonate, titanium dioxides, and carbon black (Column 4, lines 31-39).

Luhmann is silent as to teaching a water-soluble polymer in a pressure sensitive adhesive (claim 1), amount of water-soluble polymer (claims 2, 3, 8, and 9), types of water-soluble polymers (claims 4 and 10), an additive as claimed in claim 5, and filler as claimed in claim 6. The invention of Horiki is previously disclosed. Additionally, Horiki teaches that addition of prior art release agents in the adhesive layer may bring about a deterioration of stickiness, weatherability, heat resistance and the like (column 1, lines 39-42). According to Horiki, the water-soluble polymer [of his invention] in emulsion type adhesive may increase the cohesive force of the adhesive and at the same time give the adhesive a releasing property (column 1, lines 62-65). Since the water-soluble polymer of [Horiki's invention] does not soften even at high temperature, the cohesive force of the adhesive does not decrease in high temperature, and the water-soluble polymer does not deteriorate stickiness and weatherability of the adhesive (column 1, lines 62-68, column 2, lines 1-2). Thus, **compared** to the prior art release agents the water-soluble polymer (release agent) of Horiki provides **improvement** in weatherability and stickiness of the adhesive. Additionally, note that the water soluble polymer of Horiki is shown to be compatible with the adhesives comprising block copolymers such

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as styrene-butadiene block copolymer and stickifier (tackifier) such as rosin and rosin derivatives (column 2, line 19 and column 2, line 49). The primary reference of Luhmann also discloses pressure sensitive adhesive composition comprising styrene-butadiene block copolymers (column 3, line 63, column 4, lines 1-4) and tackifier such as rosin and its derivatives (column 4, line 16). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add the water-soluble polymer of Horiki in the amount disclosed by Horiki in the pressure-sensitive adhesive of Luhmann, motivated by the desire to improve the cohesive force of the pressure-sensitive adhesive of Luhmann without deteriorating the stickiness of the pressure-sensitive adhesive.

5. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Horiki et al. (US 5,897,949).

Regarding claim 11, the invention of Horiki is previously disclosed; Horiki discloses claimed invention except for an adhesive applied onto the both sides of the base (i.e. double-sided adhesive sheet). However, since the adhesive of Horiki is applied to one side of the base, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply an adhesive layer on the second side of the base of Horiki to make a double-sided adhesive sheet strip, because doing so would involve routine skill in the art.

Response to Arguments

6. Applicant's arguments filed on 05/31/07 have been fully considered but they are not persuasive.

The 35 USC Section 102(b) rejection based on Horiki is maintained for the following reasons.

Applicant argues that the Examiner has not given any patentable weight to the preamble of claim 1 and the preamble should be given a patentable weight. Applicant has referred the Examiner to the specification in order to support his/her arguments. Additionally, Applicant states that the surprising results of the present invention are that the water-soluble polymer brings about a distinct increase in holding power under moisture conditions of hydrophilic substrate. The Examiner respectfully disagrees. Note a preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). The masking member (adhesive sheet strip) of Horiki comprises a base (substrate) layer having an adhesive mixture coated onto the base layer (abstract). Further the adhesive mixture of Horiki comprises a water-soluble polymer (column 1, lines 59-61), adhesive such as styrene-butadiene block copolymer latex (column 2, lines 19-20), and stickifier (tackifier) such as rosin derivative (column 2, lines 49-51). Additionally, Horiki discloses that the adhesive of his invention has large

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cohesive force, which prevents the adhesive layer from being transferring from the masking member to the part of the surface of the article (abstract), which reads on Applicant's PSA sheet strip is redetachable from a substrate without residue. To the Examiner, the adhesive sheet strip of Horiki is structurally and compositionally identical to Applicant's product, and therefore the preamble is not given any patentable weight. As to the arguments regarding increase in holding power, these arguments are irrelevant to the basis of the rejection, because the rejection is anticipatory.

Applicant argues that masking member as taught by Horiki are usually removed from substrate by pulling them off, not by stretching. These arguments are not found persuasive because the structure and composition of the making member of Horiki are identical to Applicant's claimed invention; therefore the masking member of Horiki is functionally capable of being removed from a substrate by stretching. Applicant argues that Horiki's water-soluble polymer is added to an adhesive, which is not taught as being stretchable; and is not taught as being residuless. According to Applicant "In fact, the addition of the water-soluble polymer is taught to "...prevent the adhesive layer...from transferring to the surface of the article...". These arguments are not found persuasive, because Horiki discloses the same adhesive mixture as that of the presently claimed invention, specifically the adhesive mixture of Horiki comprises a block copolymer, tackifier, and a water-soluble polymer, and therefore the adhesive of Horiki would inherently be stretchable. Further note that there is no requirement that a person of ordinary skill in the art would have recognized the inherent disclosure at the time of invention (See MPEP 2112). As to the issue of adhesive being residuless, the

Applicant's citation of Horiki which teaches that the addition of water-soluble polymer to the adhesive of prevents the adhesive layer from transferring to the surface of an article supports the Examiner's rejection. The fact that the adhesive of Horiki does not transfer to the surface of the article proves that it is residuless (i.e. does not leave any adhesive residue on a surface of a substrate when removed from the surface).

Applicant argues that the present invention is not obvious over Horiki. These arguments are irrelevant to the basis of the rejection in view of Horiki, because Horiki anticipates the claimed invention. Accordingly, art rejections are maintained.

The 35 USC Section 103(a) rejection based on Luhmann in view of Horiki are maintained for the following reasons.

Applicant argues that Horiki reference does not teach or suggest that the adhesive that is redetachable by stretching. The Examiner respectfully disagrees because the Examiner is not relying on Horiki reference for this limitation; instead the primary reference of Luhmann as stated in the abstract and at column 1 lines 3-5 discloses this feature. Further it is noted that Applicant's argument on page 11 of 05/31/07 amendment supports that the adhesive of Luhmann is redetachable by stretching.

Applicant argues that Horiki reference would not lead to one of ordinary skill in the art, among myriad of design choices, to apply its water-soluble polymer to an adhesive such as that of Luhmann. According to Applicant this is because Horiki teaches the use of the water-soluble polymer for an increase in cohesive force and the adhesive of Luhman is already cohesive. The Examiner respectfully disagrees. While it

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is true that the adhesive of Luhmann is cohesive, there is no teaching or suggestion in the secondary reference of Horiki that would indicate that the water-soluble polymer of his invention would reduce the bond strength. In fact, as previously noted, compare to the prior art release agents, Horiki teaches that the water-soluble polymer (release agent) of his invention will not reduce the stickiness (bond strength) of the adhesive (column 1 lines 65-68 and column 2 lines 1-2). Horiki also teaches that a further object of his invention is to provide the adhesive layer having a suitable stickiness (column 1, lines 48-49). Further, the claim is obvious when there is infinite number of options available, and if a person of ordinary skill in the art has a good reason to pursue the known option within his or her technical grasp to arrive at anticipated success. In the instant case, the use of a water-soluble polymer of Horiki improves cohesiveness without degrading the stickiness (adhesiveness) of the adhesive. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add the water-soluble polymer of Horiki in the amount disclosed by Horiki in the pressure-sensitive adhesive of Luhmann, motivated by the desire to improve the cohesive force of the pressure-sensitive adhesive of Luhmann without deteriorating the stickiness of the pressure-sensitive adhesive.

Applicant argues that Horiki uses a water-soluble polymer for improving cohesion whereas the present invention involves the use of the water-soluble polymer for an increase in holding powder, particularly in humid room. According to Applicant, therefore one skilled in the art would be taught away from applying the water-soluble polymers of Horiki in the adhesive of Luhmann. The Examiner respectfully disagrees.

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In response to applicant's argument that Applicant uses water-soluble polymer for an increase in holding powder, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter.1985).

Applicant argues that the Examiner's analysis is based on impermissible hindsight. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). The primary reference of Luhmann discloses Luhmann teaches an adhesive tape which can be redetached by pulling, without residue and without damage, having a foam backing coated on one or the both sides with a self-adhesive composition (see Abstract). Moreover, the self-adhesive tape of Luhmann contains block copolymers (Column 3, lines 60-61) and tackifiers (Column 4, line16). Regarding the claims 5 and 6, the pressure sensitive adhesive of Luhmann contains plasticizers, light stabilizes, antioxidants, and fillers such as silica, glass, alumina, zinc oxides, calcium carbonate, titanium dioxides, and carbon black (Column 4, lines 31-39). Luhmann is silent with respect to teaching water-soluble polymer as required by the presently claimed

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invention. The secondary reference of Horiki is relied upon to teach a water-soluble polymer. Further, Horiki discloses that the water-soluble polymer of his invention provides large cohesive force and yet it does not deteriorate the stickiness of the adhesive such that it leaves no adhesive transfer on a substrate surface (abstract, column 1 lines 65-68, column 2 lines 1-2). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add the water-soluble polymer of Horiki in the amount disclosed by Horiki in the pressure-sensitive adhesive of Luhmann, motivated by the desire to improve the cohesive force of the pressure-sensitive adhesive of Luhmann without deteriorating the stickiness of the pressure-sensitive adhesive. Therefore nothing was relied on that could be gleaned only from the applicant's disclosure. That is what is required for improper hindsight. Thus, Applicant's arguments with respect to hindsight are not persuasive. Accordingly, art rejections are maintained.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anish Desai whose telephone number is 571-272-6467. The examiner can normally be reached on Monday-Friday, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Elizabeth M. Cole/
Primary Examiner,
Art Unit 1771

/A. D./

APD